

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPELLANTS: Viktor BENZ et al CONFIRMATION NO.: 7828  
SERIAL NO.: 10/815,038 GROUP ART UNIT: 2625  
FILED: March 31, 2004 EXAMINER: Neil R. McLean  
TITLE: "METHOD, COMPUTER AND COMPUTER PROGRAM  
MODULES TO TRANSFER DATA IN A COMPUTER  
NETWORK, AND SUCH A COMPUTER NETWORK"

**MAIL STOP APPEAL BRIEF-PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**APPELLANTS' MAIN APPEAL BRIEF**

SIR:

In accordance with the provisions of 37 C.F.R. §41.37, and the earlier filed Notice of Appeal, Appellants file this Appeal Brief in support of the appeal from the final rejection of the Examiner of claims 43-59 in the final Office Action of October 27, 2008. That rejection of claims was reaffirmed following a telephone conference with the Examiner on February 24, 2009. Those claims are set forth in the CLAIMS APPENDIX attached herewith.

**REAL PARTY IN INTEREST:**

The real party in interest is the assignee, OCÉ Printing Systems GmbH of Poing, Germany.

**RELATED APPEALS AND INTERFERENCES:**

There are no related appeals and no related interferences.

**STATUS OF CLAIMS:**

Claims being appealed from are claims 43-59. Claims 1-42 are cancelled. All of the non-cancelled claims are being appealed from and are set forth in the attached CLAIMS APPENDIX.

**STATUS OF AMENDMENTS:**

The Response to the final Office Action filed February 23, 2009, has been entered by the Examiner and was discussed in a telephone interview with the Examiner on February 24, 2009. The Examiner later indicated by return voicemail that the claims remain rejected.

**SUMMARY OF CLAIMED SUBJECT MATTER:**

A concise explanation of the subject matter defined in each of the independent claims involved in this Appeal, referring to the Specification by page and line number, and to reference numbers in the drawings, is set forth below. There are no means-plus-function elements in the claims. A DRAWING APPENDIX is attached herewith for convenience.

**Independent Claim 43**

Claim 43 relates to a method to transfer print data in a server system having a first print data server (Fig. 2 – 10) (p. 10, l. 19-24; p. 11, l. 1-2).

The first print data server (Fig. 2-10) is provided with a supplying computer module (Fig. 2-15) as a computer-readable medium having a computer program and which supplies print data (p. 10, l. 22-24).

A reading computer module (Fig. 2-16) is provided as a computer-readable medium having a computer program that reads the supplied print data (p. 10, I. 22-24; p. 11, I. 1-3).

One of the following transmission modes is selected (p. 5, I. 3-24 to p. 6, I. 1-9):

1. A complete storage of a print data in a file occurs before the reading computer module reads the print data (p. 10, I. 1-5; p. 11, I. 8-10);
2. A segment-by-segment storage of the data in a file occurs such that the reading computer module already begins with the reading of the segment while the supplying computer module is still supplying print data (p. 10, I. 6-13; p. 11, I. 17-20); and
3. A direct transmission of the print data between the supplying computer module and the reading computer module occurs without buffering (Fig. 3-15, 16) (p. 10, I. 14-18; p. 12, I. 20-24).

The selection of the transmission mode is controlled by at least one control parameter predetermined in a print job manager (Fig. 1-4); (p. 9, I. 9-12 and 18-23), the reading computer module (Fig. 2-16) and the supplying computer module (Fig. 2-15) cooperating via at least one control parameter (p. 9, I. 9-12; p. 11, I. 3-7).

The selection of the transmission mode is controlled dependent on the print job (p. 9, I. 18-23; p. 10, I. 1-18; p. 11, I. 3-7).

### **Independent Claim 51**

Claim 51 relates to a method to transfer data in a print data server system having at least first and second print data servers (Fig. 2 – 10, 11) (p. 10, l. 19-24; p. 11, l. 1-2).

The first print data server (Fig. 2-10) is provided with a supplying computer module (Fig. 2-15) as a computer-readable medium having a computer program and which supplies print data (p. 10, l. 22-24).

The second print data server (Fig. 2-11) is provided with a reading computer module (Fig. 2-16) as a computer-readable medium having a computer program that reads the supplied print data (p. 10, l. 22-24; p. 11, l. 1-3).

One of the following transmission modes is selected (p. 5, l. 3-24 to p. 6, l. 1-9):

1. A complete storage of a print data in a file occurs before the reading computer module reads the print data (p. 10, l. 1-5; p. 11, l. 8-10);

2. A segment-by-segment storage of the data in a file occurs such that the reading computer module already begins with the reading of the segment while the supplying computer module is still supplying print data (p. 10, l. 6-13; p. 11, l. 17-20); and

3. A direct transmission of the print data between the supplying computer module and the reading computer module occurs without buffering (Fig. 3-15, 16) (p. 10, l. 14-18; p. 12, l. 20-24).

The selection of the transmission mode is controlled by at least one control parameter predetermined in a print job manager (Fig. 1-4) (p. 9, l. 9-12 and 18-23),

the reading computer module (Fig. 2-16) and the supplying computer module (Fig. 2-15) cooperating via at least one control parameter (p. 9, l. 9-12; p. 11, l. 3-7).

The selection of the transmission mode is controlled dependent on the print job (p. 9, l. 18-23; p. 10, l. 1-18; p. 11, l. 3-7).

The data is supplied in blocks in a block format predetermined by the supplying computer module (Fig. 2-15) (p. 6, l. 13-16).

Given the storage in segments of print data, print data of a print job are already further processed via the reading computer module (Fig. 2-16) in a subsequent process, while subsequent print data of the same print job are still being stored (p. 10, l. 10-13).

#### **Independent Claim 52**

Claim 52 relates to a computer program system to transfer data in a network of print data servers (Fig. 2 ~ 10, 11) (p. 10, l. 19-24; p. 11, l. 1-2).

A first print data server (Fig. 2-10) is provided with a supplying computer module (Fig. 2-15) as a computer-readable medium having a computer program and which supplies print data (p. 10, l. 22-24).

A reading computer module (Fig. 2-16) is provided as a computer-readable medium having a computer program that reads the supplied print data (p. 10, l. 22-24; p. 11, l. 1-3).

One of the following transmission modes is selected (p. 5, l. 3-24 to p. 6, l. 1-9):

1. A complete storage of a print data in a file occurs before the reading computer module reads the print data (p. 10, l. 1-5; p. 11, l. 8-10);

2. A segment-by-segment storage of the data in a file occurs such that the reading computer module already begins with the reading of the segment while the supplying computer module is still supplying print data ((p. 10, l. 6-13; p. 11, l. 17-20); and

3. A direct transmission of the print data between the supplying computer module and the reading computer module occurs without buffering (Fig. 3-15, 16) (p. 10, l. 14-18; p. 12, l. 20-24).

The selection of the transmission mode is controlled by at least one control parameter predetermined in a print job manager (Fig. 1-4); (p. 9, l. 9-12 and 18-23), the reading computer module (Fig. 2-16) and the supplying computer module (Fig. 2-15) cooperating via at least one control parameter (p. 9, l. 9-12; p. 11, l. 3-7).

The selection of the transmission mode is controlled dependent on the print job (p. 9, l. 18-23; p. 10, l. 1-18; p. 11, l. 3-7).

**GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL:**

1. Whether claims 43-59 are obvious under 35 U.S.C. §103 based on Hu in view of Ueda.

**ARGUMENT:**

**Manner in Which Claims 43-59 as a Group Distinguish Over Hu In View of Ueda**

Claims 43-59 are treated as a group herein. Claim 43 is representative of the Group. The following underlining in claim 43 indicates the portions of that claim which clearly distinguish over Hu in view of Ueda:

43. A method to transfer print data in a server system having a first print data server, comprising the steps of:

providing the first print data server with a supplying computer module as a computer-readable medium having a computer program and which supplies print data;

providing a reading computer module as a computer readable medium having a computer program that reads the supplied print data;

selecting one of the following transmission modes

a complete storage of the print data in a file occurs before the reading computer module reads the print data,

a segment-by-segment storage of the data in a file occurs such that the reading computer module already begins with the reading of a segment while the supplying computer module is still supplying print data, and

a direct transmission of the print data between the supplying computer module and the reading computer module occurs without buffering;

controlling the selecting of the transmission mode by at least one control parameter predetermined in a print job manager, the reading computer module and the supplying computer module cooperating via the at least one control parameter; and

also controlling the selecting of the transmission mode dependent on the print job.

At the outset, an understanding of what the Hu reference teaches is critical.

As shown in Figure 8, a server bypass device is provided having the switching element 101 and a routing control 100. Data from the network 130 is sent by the switching element either to the storage or to the server 120. Hu identifies four categories of data at column 5, lines 40-51. Category 1 is real time data sent from network 130 to the storage. Category 2 data is non-real-time data sent from network 130 to the storage. Category 3 is server oriented traffic data sent from the network 130 to the server 120. Category 4 is all other types of data which is sent from the network 130 to the server 120 as a default.

At column 5, line 52, Hu clearly teaches that both the category 1 real-time and the category 2 non-real-time data transfer is from the network 130 to the storage while categories 3 and 4 is a data transfer to the server 120 in Fig. 8.

As disclosed at column 6, lines 1-18 of Hu, *all of the data* is divided into segments regardless of whether it is in application categories, 1, 2, 3 or 4.

At column 6, lines 19-25 the expanded routing table (ERT) is described as shown in Figure 14. As illustrated in Fig. 14, this expanded routing table sends the segmented data if it is real-time to the destination storage (Category 1) and the segmented non-real-time data (Category 2) to the destination storage.

Now it will be described why the claim language of claim 43 readily distinguishes over the combination of Hu as the primary reference combined with Ueda.

The Examiner cited Ueda only for the well known structure of a network sending data to a print server and then from the print server to the printer. This is shown in Ueda Figure 1.

The Examiner would substitute these teachings of Ueda into Figure 8 of Hu so that the network 130 shown in Hu Fig. 8 would be a print data network and the server 120 in Figure 8 of Hu would be a print server connected to a printer.

Assuming these substitutions, Hu clearly still would not suggest claim 43. First, claim 43 recites a first print data server such as shown in Applicants' Fig. 2 with the supplying computer module shown at 15 which supplies print data on line 14. A reading computer module shown at 16 reads the supplied print data on line 14. As recited in dependent claim 49, this reading computer module 16 may be running on a

second print data server 11 or, as recited in dependent claim 50, both the supplying computer module and the reading computer module may be running on the first server. The Examiner is analogizing in Figure 8 of Hu the network 130 as being the supplying computer module and the server 120 as being the reading computer module that reads the supplied print data.

Claim 43 goes on to recite selecting one of the following transmission modes:

1) a complete storage before the reading; 2) a segment-by-segment storage so that the reading of one segment can begin while other segments are still being supplied; and 3) a direct transmission between the supplying module and the reading module *without buffering*. For the complete storage, the Examiner relies on Hu category 2 – non-real-time data transfer. For the segment-by-segment storage and reading the Examiner relies on Hu column 6, lines 1-18. For the direct transmission, the Examiner relies on the real-time data transfer category 1 of Hu at column 5, line 41.

First it is noted that even with Hu's category 1 real-time data transfer *that it is segmented* according to column 6, lines 1-18. But claim 43 requires a direct transmission without buffering. But segmenting is buffering. Thus Hu teaches away because he segments the real-time transfer. Thus there is no direct transmission without buffering as recited in claim 43.

Secondly, Hu clearly teaches that the real-time and the non-real-time transfer is to a storage *and not to the server 120*. There is no reading of the supplied print data at a reading computer module but only a storage of the data in the storage by a *writing*. Thus Hu teaches away.

Thirdly, claim 43 recites that for the segment-by-segment storage there is reading of the segment while the supplying computer is still supplying print data. There is no disclosure of this anywhere in the segmentation disclosure of Hu at column 6, lines 1-18.

Fourthly, claim 43 next recites controlling the selecting of the transmission mode by at least one control parameter predetermined in a print job manager. For this the Examiner cites the Expanded Routing Table (ERT) at column 6, line 20 of Hu. But this routing table ERT *as shown in Figure 14 does not control segmenting or no segmenting, and does not control real-time or non-real-time transfer*. Rather, if the data is real-time it routes the data to a storage, if it is non-real-time it routes the data to a storage, and if it is local it routes the data to the server S shown at 120 in Figure 8. Thus the ERT is *not controlling the selection of the transmission mode* but is only controlling the destination for the data either between storage or the server S at 120 in Figure 8. Thus Hu clearly does not disclose this controlling element of claim 43 for selecting the transmission mode.

Fifthly, claim 43 distinguishes by reciting also controlling the selecting of the transmission mode dependent on the print job. But the real time data transfer or the non-real-time transfer at column 5, lines 41-46 of Hu *in both cases* goes to a storage and there is no change from real-time to non-real-time data transfer based on the type of print job. Also segmenting in Hu occurs 100% of the time and therefore whether to segment or not is clearly not dependent on the print job.

Since claim 43 distinguishes over Hu combined with Maeda for five separate reasons, any one of which is sufficient to distinguish, the Examiner's rejection of claim 43, and all other claims 44-59 in the group, should be reversed.

This Appeal Brief is accompanied by electronic payment for the requisite fee in the amount of \$540.00 pursuant to 37 C.F.R. §41.20(b)(2).

Applicants rely on this Appeal Brief and waive oral argument.

Respectfully Submitted,

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## **CLAIMS APPENDIX**

43. A method to transfer print data in a server system having a first print data server, comprising the steps of:

providing the first print data server with a supplying computer module as a computer-readable medium having a computer program and which supplies print data;

providing a reading computer module as a computer readable medium having a computer program that reads the supplied print data;

selecting one of the following transmission modes

a complete storage of the print data in a file occurs before the reading computer module reads the print data,

a segment-by-segment storage of the data in a file occurs such that the reading computer module already begins with the reading of a segment while the supplying computer module is still supplying print data, and

a direct transmission of the print data between the supplying computer module and the reading computer module occurs without buffering;

controlling the selecting of the transmission mode by at least one control parameter predetermined in a print job manager, the reading computer module and the supplying computer module cooperating via the at least one control parameter; and

also controlling the selecting of the transmission mode dependent on the print job.

44. A method according to claim 43 wherein in the transmission mode with the direct transmission of the data, the reading computer module reacts, controlled

by at least one parameter, in one of the following manners when data to be read no longer exists:

the read event is continuously repeated until data to be read is present, or until the reading computer module receives the notification that data is no longer being supplied, or

the read event is aborted.

45. A method according to claim 43 wherein the data are supplied in blocks in a block format determined by the supplying computer module.

46. A method according to claim 43 wherein the data transmission of the data occurs via a socket connection established between the supplying computer module and the reading computer module.

47. A method according to claim 43 wherein given the storage in segments of print data, print data of a print job are already further processed via the reading computer module in a subsequent process, while subsequent print data of the same print job are still being stored.

48. A method according to claim 43 wherein the transmission mode to be applied is established dependent on the print job in a print job corollary file.

49. A method according to claim 43 wherein the reading computer module runs on a second print data server.

50. A method according to claim 43 wherein both the supplying computer module and the reading computer module run on the first server.

51. A method to transfer data in a print data service system comprising at least first and second print data servers, comprising the steps of:

providing the first print data server with a supplying computer module as a computer readable medium having a computer program supplying print data;

providing the second print data server with a reading computer module as a computer-readable medium having a computer program that reads the supplied print data;

selecting one of the following transmission modes

a complete storage of the print data in a file occurs before the reading computer module reads the print data,

a segment-by-segment storage of the data in a file occurs such that the reading computer module already begins with the reading of a segment while the supplying computer module is still supplying print data, and

a direct transmission of the print data between the supplying computer module and the reading computer module occurs without buffering;

controlling the selecting of the transmission mode by at least one control parameter predetermined in a print job manager, the reading computer module and the supplying computer module cooperating via the at least one control parameter;

also controlling the selecting of the transmission mode dependent on the print job;

the data being supplied in blocks in a block format predetermined by the supplying computer module; and

given the storage in segments of print data, print data of a print job are already further processed via the reading computer module in a subsequent process, while subsequent print data of the same print job are still being stored.

52. A computer program system to transfer data in a network of print data servers, comprising:

a first print data server comprising a supplying computer module as a computer-readable medium having a computer program supplying print data;

a reading computer module as a computer-readable medium having a computer program that reads the supplied print data;

the supplying computer module and the reading computer module employing one of the following transmission modes

a complete storage of the data in a file occurs before the reading computer module reads the data

the segment-by-segment storage of the data in a file occurs such that the reading computer module already begins with the reading of the segment while the supplying computer module is still supplying data, and

a direct transmission of the data between the supplying computer module and the reading computer module occurs without buffering;

a print job manager having at least one predetermined control parameter for controlling the selecting of the transmission mode such that the reading computer module and the supplying computer module cooperate via the at least one control parameter; and

the print job manager also controlling the selecting of the transmission mode dependent on the print job.

53. The system of claim 52 wherein in the transmission mode with the direct transmission of the data, the reading computer module reacts, controlled by said at least one parameter, in one of the following manners when data to be read no longer exists:

the read event is continuously repeated until data to be read is present , or until the reading computer module receives the notification that data is no longer being supplied, or

the read event is aborted.

54. The system of claim 52 wherein the data are supplied in blocks in a block format predetermined by the supplying computer module.

55. A system according to claim 52 wherein the data transmission of the data occurs via a socket connection established between the supplying computer module and the reading computer module.

56. A system according to claim 52 wherein given storage in segments of print data, print data of a print job are already further processed via the reading computer module in a subsequent process, while subsequent print data of the same print job are still being stored.

57. A system according to claim 52 wherein the supplying computer module runs on the first server and the reading computer module runs on a second print data server.

58. A system according to claim 52 wherein both the supplying computer module and the reading computer module run on the first print data server.

59. A system according to claim 52 wherein the transmission mode is selected controlled by a plurality of parameters, and wherein the reading computer module and the supplying computer module cooperate via the parameters.

**DRAWINGS APPENDIX**

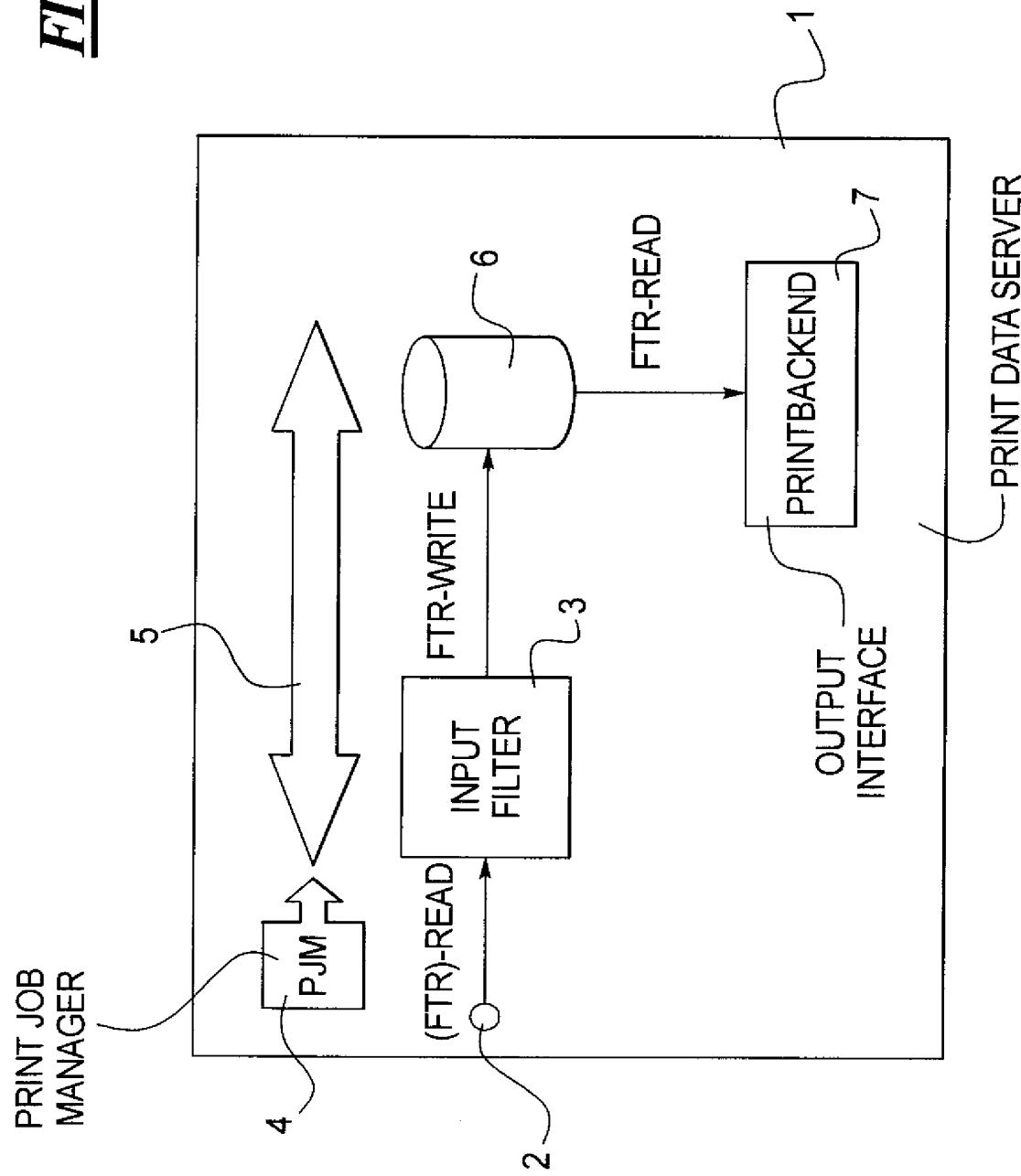
Figure 1

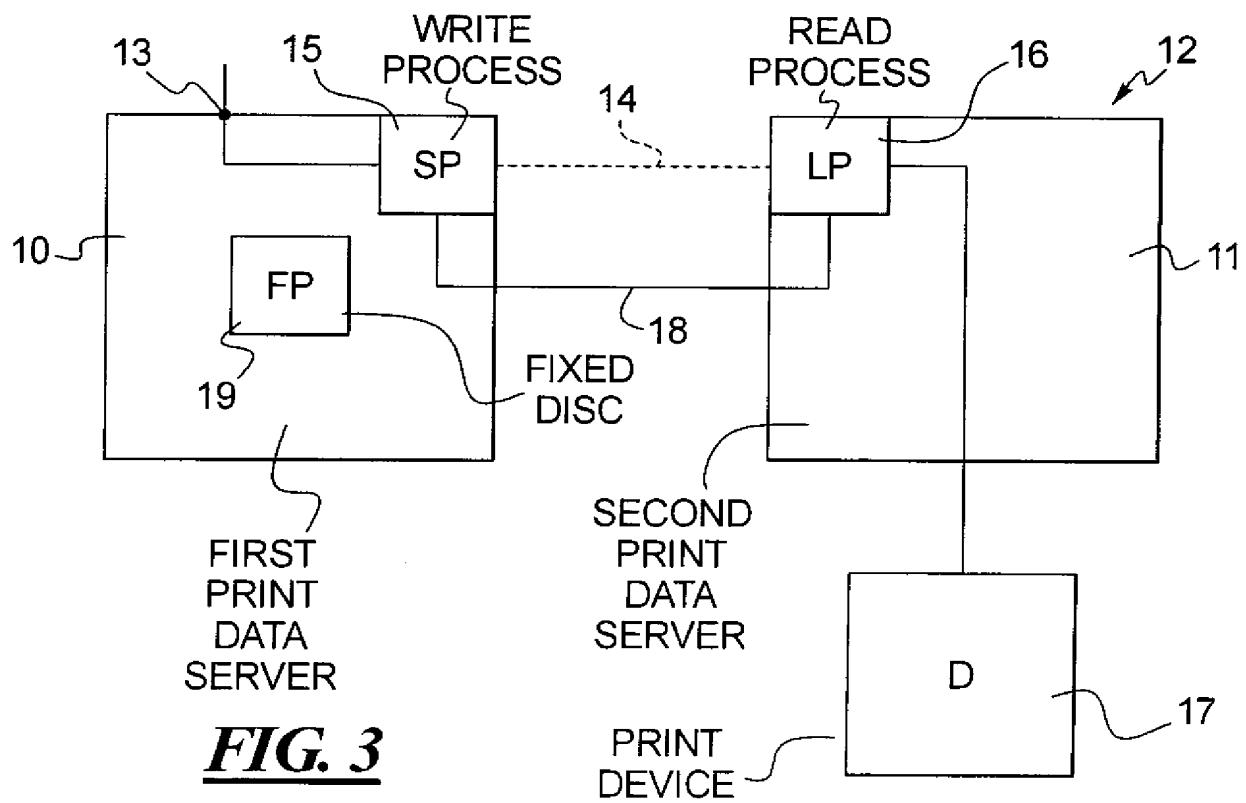
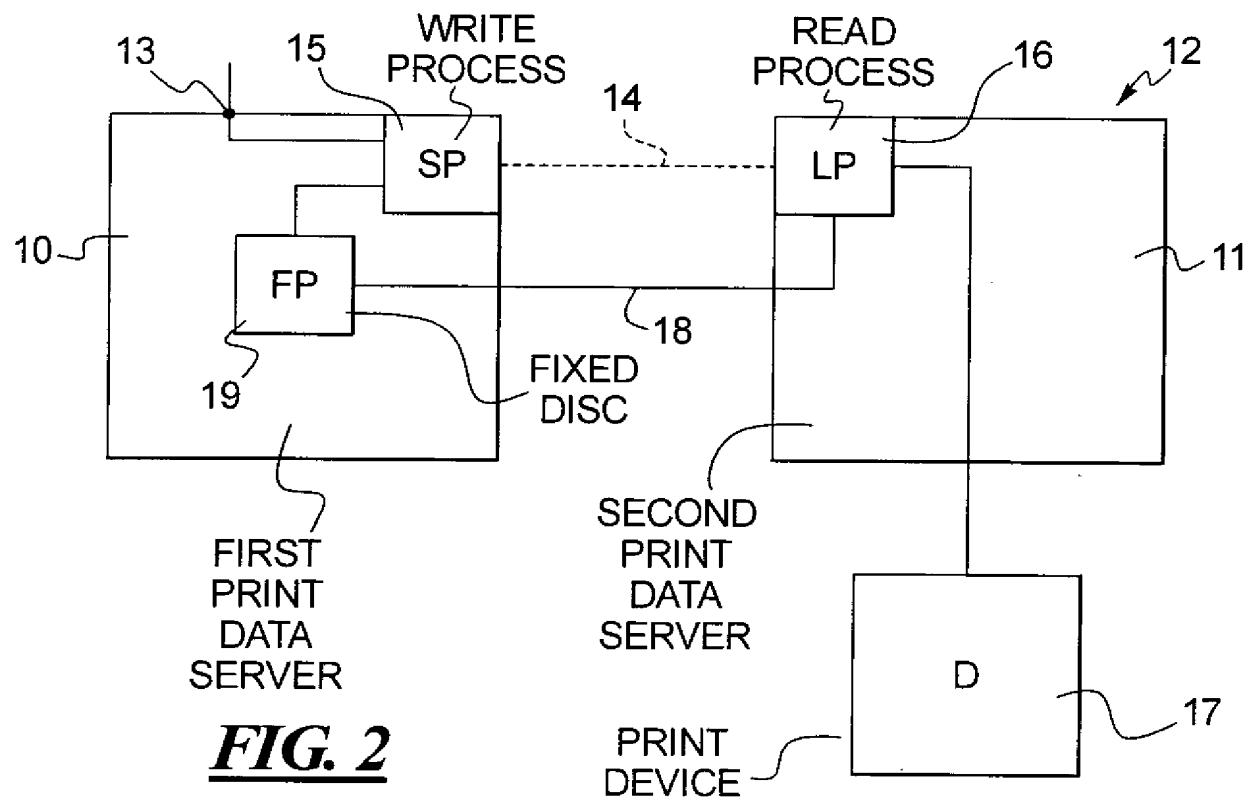
Figure 2

Figure 3

CH1\6270199.1

FIG. 1





## **EVIDENCE APPENDIX**

None

**RELATED PROCEEDINGS APPENDIX**

None